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G70-D GENERAL PERMIT ENGINEERING EVALUATION

PREVENTION AND CONTROL OF AIR POLLUTION IN REGARD TO THE CONSTRUCTION, MODIFICATION,
RELOCATION, ADMINISTRATIVE UPDATE AND OPERATION OF NATURAL GAS PRODUCTION FACILITIES
LOCATED AT THE WELL SITE

APPLICATION NO.: G70-D229

FACILITY ID: 095-00064

☐ CONSTRUCTION
☒ MODIFICATION
☐ RELOCATION

☐ CLASS I ADMINISTRATIVE UPDATE
☐ CLASS II ADMINISTRATIVE UPDATE

BACKGROUND INFORMATION

Name of Applicant (as registered with the WV Secretary of State's Office): Jay-Bee Oil & Gas, Inc.

Federal Employer ID No. (FEIN): 55-073-8862

Applicant's Mailing Address: 3570 Shields Hill Road

City: Cairo

State: WV

ZIP Code: 26337

Facility Name: Happy Well Pad

Operating Site Physical Address: Off Walnut Fork, CR 13/1

If none available, list road, city or town and zip of facility.

City: Alma

Zip Code: 26320

County: Tyler

Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):

Latitude: 39.469846

Longitude: -80.750799

SIC Code: 1311

NAICS Code: 211111

Date Application Received:

November 23, 2016

Fee Amount: \$4,000.00

Date Fee Received: November 29, 2016

Applicant Ad Date: November 30, 2016

Newspaper: Tyler Star News

Date Application Complete: January 20, 2017

Due Date of Final Action: March 7, 2017

Engineer Assigned: Roy F. Kees, P.E.

Description of Permitting Action: Jay-Bee is applying for a G70D permit, adding 7 new wells to existing permit G70-A184 and the recently acquired ICON Happy dehydration facility (R13-3306) to this new application.

PROCESS DESCRIPTION

Jay Bee Oil & Gas is seeking to modify the Happy Production Facility (WV Facility ID No. 095-00064 and WV G70-A184) by increasing the number of wells on the Happy Well Pad and incorporating the Happy Dehydration Facility (WV R13-3306), recently acquired from ICON Midstream Pipeline, LLC (ICON), into a new WV G70-D permit.

At the Happy facility, natural gas and produced fluids (condensate and water) will be received from eight Marcellus wells (two existing and six new) and one new Utica well and then passed through gas processing units (one per Marcellus well, two per Utica well) to avoid ice formation during subsequent pressure drops. The materials will then pass through a three-way separator for gas, condensate, and produced water separation.

Water vapor will be removed from the gas stream with a new, 40-mmscfd dehydration unit and the existing 20-mmscfd dehydration unit acquired from the ICON Happy dehydration facility. Dry gas will then be routed to a gathering pipeline owned and operated by others. Emissions from the dehydration unit still vents will be routed to two enclosed combustors (one existing and one new).

Both condensate and produced water will be accumulated in sixteen 210 BBL tanks (eight for condensate and eight for produced water), pending truck transportation by others. The condensate will be transported to a regional processing facility and the produced water a regional disposal facility.

Flash, working and breathing losses from these tanks will be routed to a vapor recovery unit (VRU) with the captured vapors routed back to the raw gas discharge line. Two new enclosed combustors will be utilized as a backup control devices for times when the VRU is not available (estimated max of 440 hours per year) or if a large slug of condensate production generates flash gas in excess of the capacity of the VRU. The VRU utilizes an 84HP driver that utilizes natural gas produced at the site as fuel. A capture and control efficiency of 95% is claimed for the VRU and 98% for the combustors. Once vapor reduces past the point that the VRU is able to process it, the combustor will then be converted as the primary source of recovery.

The Happy facility utilizes a Thermo-electric generator to meet the minor electric demands for various monitoring and data tracking equipment on the well pad. Finally, a Caterpillar model 3516 gas compressor engine will be installed at the site to facilitate the transfer of produced gas.

SITE INSPECTION

Site Inspection Date: May 17, 2016

Site Inspection Conducted By: James Robertson

Results of Site Inspection: The dehydration facility is located at the existing Happy Well Pad, owned by Jay-Bee Oil & Gas. The site is located in a remote area, with the nearest dwelling well over 300' from the facility. It should be noted that the dehydration facility has been installed prior to issuance of the proposed permit, but was not in operation during the site visit. It is my opinion that this site is suitable for a General Permit.

Did Applicant meet Siting Requirements? Yes

If applicable, was siting criteria waiver submitted? N/A

Directions to Facility: From Middlebourne, proceed south/east on State Route 18 (Main Street) out of town. Proceed approximately 5.8 miles to the junction with Indian Creek Road on the left. From WV 18 and Indian Creek CR13 intersection, take Indian Creek Rd east for 4.6 miles. Turn left onto CR 13/1 (Walnut Fork) follow north for 2.0 miles to well pad entrance on left. Access road is approximately 0.9 miles.

Overhead Google Earth Image of Facility:



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The following table indicates which methodology was used in the emissions determination:

Emission Unit ID#	Process Equipment	Calculation Methodology (e.g. ProMax, GlyCalc, mfg. data, AP-42, etc.)
HTR1-HTR10	(10) GPU Heaters	AP-42
HTR-11	Line Heater	AP-42
RBV-1	Reboiler	AP-42
RSV-1	Dehy Still Vent	GlyCalc
RBV-2	Reboiler	AP-42
RSV-2	Dehy Still Vent	GlyCalc
EC1-EC3	(3) Enclosed Combustors	AP-42
VRU-1	VRU Driver	Manufacturer Data / AP-42
T01-T02, T05-T10	(8) Condensate Tanks	Gas To Oil Ratio / Tanks
T03-T04, T11-T16	(8) Produced Water Tanks	Gas To Water Ratio / Tanks
TL-1	Condensate Loading	AP-42
TL-2	Produced Water Loading	AP-42
TEG-1	Thermoelectric Generator	AP-42
CE-1	Compressor Engine	Manufacturer Data / AP-42
FUG	Fugitive Emissions	AP-42

The total facility PTE for the facility (including fugitive emissions) is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)	PTE Change for Modification (tons/year)
Nitrogen Oxides	20.20	+19.70
Carbon Monoxide	36.50	+34.37
Volatile Organic Compounds	53.80	+50.83
Particulate Matter	29.20	+29.12
Particulate Matter-10/2.5	29.20	+29.12
Sulfur Dioxide	0.08	+0.08
Formaldehyde	1.48	+1.48
Total HAPs	4.21	+3.61
Carbon Dioxide Equivalent	26,261	+26,261

Maximum detailed controlled point source emissions were calculated by the applicant and checked for accuracy by the writer and are summarized in the table on the next page.

APPLICANT: Jay-Bee Oil & Gas, Inc.															FACILITY NAME: Happy Production Facility										G70-D229		
Emission Point ID#	NO _x		CO		VOC		SO ₂		PM ₁₀		PM _{2.5}		GHG (CO ₂ e)														
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy													
HTR1-HTR10	1.50	6.57	1.26	5.52	0.08	0.36	0.01	0.04	0.11	0.50	0.11	0.50	1811.00	7934.00													
HTR-11	0.05	0.22	0.04	0.18	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.02	60.40	264.50													
RBV-1	0.03	0.13	0.03	0.11	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	36.20	158.70													
RSV-1/RSV-2/EC-1	0.34	1.51	1.41	6.19	0.37	1.64	0.00	0.00	0.05	0.22	0.05	0.22	541.00	2370.00													
RBV-2	0.05	0.22	0.04	0.18	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.02	60.40	264.50													
EC2-EC3	0.94	4.12	4.66	20.40	TANKS	TANKS	0.00	0.00	0.05	0.21	0.05	0.21	1595.40	6988.00													
VRU-1	0.19	0.81	0.37	1.62	0.04	0.18	0.00	0.00	0.01	0.06	0.01	0.06	89.70	393.00													
T01-T16	--	--	--	--	16.47	37.88	--	--	--	--	--	--	--	--													
TL-1	--	--	--	--	2.48	4.07	--	--	--	--	--	--	--	--													
TL-2	--	--	--	--	0.14	0.20	--	--	--	--	--	--	--	--													
TEG-1	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57	6.88													
CE-1	1.52	6.66	0.52	2.27	1.40	6.13	0.01	0.03	0.11	0.50	0.11	0.50	1750.00	7666.00													
FUG	--	--	--	--	0.76	3.31	--	--	30.96	27.69	30.96	27.69	20.20	88.58													
TOTAL	4.62	20.20	8.33	36.50	21.76	53.80	0.02	0.08	31.31	29.20	31.31	29.20	5995.77	26261.00													

APPLICANT: Jay-Bee Oil & Gas, Inc.			FACILITY NAME: Happy Production Facility						G70-D229					
Emission Point ID#	Formaldehyde		Benzene		Toluene		Ethylbenzene		Xylenes		Hexane		Total HAPs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
HTR1-HTR10	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.12
HTR-11	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00
RBV-1	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00
RSV-1/RSV-2/EC-1	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.14
RBV-2	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00
EC2-EC3	--	--	--	--	--	--	--	--	--	--	--	--	TANKS	TANKS
VRU-1	0.02	0.07	--	--	--	--	--	--	--	--	--	--	0.02	0.10
T01-T16	--	--	--	--	--	--	--	--	--	--	--	--	0.54	1.25
TL-1	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.22
TL-2	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02
TEG-1	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.000
CE-1	0.32	1.41	0.01	0.02	0.00	0.02	0.00	0.00	0.00	0.01	0.01	0.06	0.53	2.31
FUG	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.04
TOTAL	0.34	1.48	0.02	0.07	0.04	0.14	0.00	0.00	0.01	0.04	0.70	1.61	1.31	4.21

REGULATORY APPLICABILITY

45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers) is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units.

45CSR2 states that any fuel burning unit that has a heat input under ten (10) MMBTU/hr is exempt from Sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. If the individual heat input of all of the proposed fuel burning units are below 10 MMBTU/hr, these units are exempt from the aforementioned sections of 45CSR2. However, the registrant would be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
HTR-1 - HTR-10	(10) GPU Heaters	1.50 Each
HTR-11	(1) Line Heater	0.50
RBV-1	(1) Reboiler	0.30
RBV-2	(1) Reboiler	0.50
TEG-1	(1) Thermoelectric Generator	0.013

45CSR6 (To Prevent and Control Air Pollution from the Combustion of Refuse)

45CSR6 prohibits open burning, establishes emission limitations for particulate matter, and establishes opacity requirements. Sources subject to 45CSR6 include completion combustion devices, enclosed combustion devices, and flares.

The facility-wide requirements of the general permit include the open burning limitations §§45-6-3.1 and 3.2.

All completion combustion devices, enclosed combustion devices, and flares are subject to the particulate matter weight emission standard set forth in §45-6-4.1; the opacity requirements in §§45-6-4-3 and 4-4; the visible emission standard in §45-6-4.5; the odor standard in §45-6-4.6; and, the testing standard in §§45-6-7.1 and 7.2.

Enclosed combustion control devices and flares that are used to comply with emission standards of NSPS, Subpart OOOO are subject to design, operational, performance, recordkeeping and reporting requirements of the NSPS regulation that meet or exceed the requirements of 45CSR6.

Emission Unit ID#	Maximum Design Heat Input (MDHI) (MMBTU/hr)	Subject to Weight Emission Standard?	Control Efficiency Claimed by Registrant	Provide Justification how 45CSR6 is met.
EC-1 - EC-3	10.00 Each	X Yes <input type="checkbox"/> No	98	Assuming 20,000 BTU/lb, the allowable PM emissions are 1.36 lb/hr. Using AP-42, the PM emissions were calculated to be 0.02 lb/hr.

45CSR10 (To Prevent and Control Air Pollution from the Emission of Sulfur Oxides)

45CSR10 establishes emission limitations for SO₂ emissions which are discharged from stacks of fuel burning units. A “fuel burning unit” means and includes any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Sources that meet the definition of “Fuel Burning Units” per 45CSR10-2.8 include GPUs, in-line heaters, heater treaters, and glycol dehydration unit reboilers.

Fuel burning units less than 10 MMBtu/hr are exempt. The sulfur dioxide emission standard set forth in 45CSR10 is generally less stringent than the potential emissions from a fuel burning unit for natural gas. The SO₂ emissions from a fuel burning unit will be listed in the G70-D permit registration at the discretion of the permit engineer on a case-by-case basis. Issues such as non-attainment designation, fuel use, and amount of sulfur dioxide emissions will be factors used in this determination. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Fuel burning units burning natural gas are exempt from Section 8 (Monitoring, Recording and Reporting) as well as interpretive rule 10A. The G70-D eligibility requirements exclude from eligibility any fuel burning unit that does not use natural gas as the fuel; therefore, there are no permit conditions for 45CSR10.

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
HTR-1 - HTR-10	(10) GPU Heaters	1.50 Each
HTR-11	(1) Line Heater	0.50
RBV-1	(1) Reboiler	0.30
RBV-2	(1) Reboiler	0.50
TEG-1	(1) Thermoelectric Generator	0.013

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that the applicant is defined as a “stationary source” under 45CSR13 Section 2.24.b. *Stationary source* means, for the purpose of this rule, any building, structure, facility, installation, or emission unit or combination thereof, excluding any emission unit which meets or falls below the criteria delineated in Table 45-13B which: (a) is subject to any substantive requirement of an emission control rule promulgated by the Secretary; (b) discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant; (c) discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis; (d) discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater; or, (e) an owner or operator voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so. 45CSR13 has an original effective date of June 1, 1974.

The applicant meets the definition of a stationary source because (check all that apply):

- ☒ Subject to a substantive requirement of an emission control rule promulgated by the Secretary.
- ☒ Discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant.
- ☐ Discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis.
- ☐ Discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater.
- ☐ Voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so.

General Permit G70-D Registration satisfies the construction, modification, relocation and operating permit requirements of 45CSR13. General Permit G70-D sets forth reasonable conditions that enable eligible registrants to establish enforceable permit limits.

Section 5 of 45CSR13 provides the permit application and reporting requirements for construction of and modifications to stationary sources. No person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without notifying the Secretary of such intent and obtaining a permit to construct, modify, relocate and operate the stationary source as required in the rule or any other applicable rule promulgated by the Secretary.

If applicable, the applicant meets the following (check all that apply):

- ☐ Relocation
- ☒ Modification
- ☐ Class I Administrative Update (45CSR13 Section 4.2.a)
- ☐ Class II Administrative Update (45CSR13 Section 4.2.b)

45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to all registrants that are subject to any of the NSPS requirements described in more detail in the Federal Regulations section. Applicable requirements of NSPS, Subparts IIII, JJJJ and OOOO are included in General Permit G70-D.

The applicant is subject to:

- ☐ 40CFR60 Subpart IIII
- ☒ 40CFR60 Subpart JJJJ
- ☒ 40CFR60 Subpart OOOO

45CSR22 (Air Quality Management Fee Program)

45CSR22 is the program to collect fees for certificates to operate and for permits to construct or modify sources of air pollution. 45CSR22 applies to all registrants. The general permit fee of \$500 is defined in 45CSR13. In addition to the application fee, all applicants subject to NSPS requirements or NESHAP requirements shall pay additional fees of \$1,000 and \$2,500, respectively.

Registrants are also required to obtain and have in effect a valid certificate to operate in accordance with 45CSR22 §4.1. The fee group for General Permit G70-D is 9M (all other sources) with an annual operating fee of \$200.

40CFR60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines)

Subpart IIII sets forth non-methane hydrocarbon (NMHC), hydrocarbon (HC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary compression ignition (CI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G70-D, Section 13. The following CI engines are subject to this section:

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	Provide Justification how 40CFR60 Subpart IIII is met.
N/A				<input type="checkbox"/> Met Emission Standard <input type="checkbox"/> Certified Engine

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

Subpart JJJJ sets forth nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compound (VOC) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary spark ignition (SI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G70-D, Section 13.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	Provide Justification how 40CFR60 Subpart JJJJ is met.
VRU-1	Cummins G5.9	84	>3/1/13	<input checked="" type="checkbox"/> Met Emission Standard <input type="checkbox"/> Certified Engine
CE-1	Caterpillar G3516 BLE	1380	3/21/12	<input checked="" type="checkbox"/> Met Emission Standard <input type="checkbox"/> Certified Engine

40CFR60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution)

EPA published its New Source Performance Standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. EPA published final amendments to the Subpart on September 23, 2013.

40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO₂) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. The affected sources which commence construction, modification or reconstruction after August 23, 2011 are subject to the applicable provisions of this Subpart as described below:

Gas well affected facilities are included in General Permit G70-D in Section 5.0.

Are there any applicable gas well affected facilities? ☒ Yes ☐ No

If Yes, list.

API number(s) for each Gas Well at this facility	Date the Gas Well was drilled or re-fractured
047-095-02147	Pending
047-095-02148	Pending
047-095-02225	Pending
047-095-02226	Pending
047-095-02227	Pending
047-095-02228	Pending
047-095-02229	Pending
047-095-02230	Pending
047-095-02384	Pending

Centrifugal compressor affected facilities are included in General Permit G70-D, Section 11.0.

Are there any applicable centrifugal compressor affected facilities not located at the well site?

☐ Yes ☒ No

If Yes, list.

Engine Description (Make, Model)
N/A

Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this Subpart.

Reciprocating compressor affected facilities are included in General Permit G70-D, Section 12.0.

Are there any applicable reciprocating compressor affected facilities not located at the well site?

☐ Yes ☒ No

If Yes, list.

Engine Description (Make, Model)
N/A

Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

Pneumatic controllers affected facilities are included in General Permit G70-D, Section 10.0.

Are there any applicable pneumatic controller affected facilities? ☐ Yes ☒ No

For the natural gas production segment (between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not including natural gas processing plants), each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh.

Requirements for storage vessel affected facilities are included in General Permit G70-D, Section 7.0.

Determination of storage vessel affected facility status is included in Section 6.0 of General Permit G70-D.

Are there any applicable storage vessel affected facilities? ☐ Yes ☒ No

If No, list any emission reduction devices and control efficiencies used to avoid 40CFR60 Subpart OOOO.

(2) 10.00 MMBtu/hr Enclosed Combustors, 98% Control

If Yes, list.

Emission Unit ID#	Storage Vessel Description	SV Size (gal)	Provide Justification how 40CFR60 Subpart OOOO is met.
N/A			

Each storage vessel affected facility, which is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment, and has the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section by October 15, 2013 for Group 1 storage vessels and by April 15, 2014, or 30 days after startup (whichever is later) for Group 2 storage vessels. A storage vessel affected facility that subsequently has its potential for VOC emissions decrease to less than 6 tpy shall remain an affected facility under this subpart.

40CFR63 Subpart HH (National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities)

This Subpart applies to owners and operators of each triethylene glycol (TEG) dehydration unit that are located at oil and natural gas production facilities. Only area source requirements are included in General Permit G70-D, as defined in §63.761.

For area source applicability, the affected source includes each triethylene glycol (TEG) dehydration unit located at a facility that meets the criteria specified in §63.760(a).

Glycol dehydration unit(s) are included in General Permit G70-D, Section 15.0.

Are there any TEG dehydration unit(s) at this facility? ☒ Yes ☐ No

Are the TEG dehydration unit(s) located within an Urbanized Area (UA) or Urban Cluster (UC)?
☐ Yes ☒ No

Are the glycol dehydration unit(s) exempt from 40CFR63 Section 764(d)? ☒ Yes ☐ No

If Yes, answer the following questions:

The actual annual average flowrate of natural gas to the glycol dehydration unit(s) is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in §63.772(b)(1) of this Subpart. ☐ Yes ☒ No

The actual average emissions of benzene from the glycol dehydration unit process vent(s) to the atmosphere are less than 0.90 megagram per year (1 ton per year), as determined by the procedures specified in §63.772(b)(2) of this Subpart. ☒ Yes ☐ No

40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This Subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. This section reflects EPA's final amendments to 40 CFR part 63, Subpart ZZZZ that were issued on January 15, 2013 and published in the Federal Register on January 30, 2013.

WVDEP DAQ has delegation of the area source air toxics provisions of this Subpart requiring Generally Achievable Control Technology (GACT). The provisions of this Subpart have been included in this general permit under Section 13.0.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	New or Existing under 40CFR63 Subpart ZZZZ?	Provide Justification how 40CFR63 Subpart ZZZZ is met.
VRU-1	Cummins G5.9	84	>3/1/13	New	JJJJ
CE-1	Caterpillar G3516 BLE	1380	3/21/12	New	JJJJ

Are there any engines that fall in the window of being new under 40CFR60 Subpart ZZZZ but manufactured before the applicability date in 40CFR60 Subpart JJJJ? ☐ Yes ☒ No

If so, list the engines: N/A

SOURCE AGGREGATION DETERMINATION

"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

Are there surrounding wells or compressor stations under "common control" of the applicant?

☒ Yes ☐ No

Are the properties in question located on "contiguous or adjacent" properties?

☐ Yes ☒ No

Are there surrounding facilities that share the same two (2) digit SIC code?

☒ Yes ☐ No

Final Source Aggregation Decision.

☒ Source not aggregated with any other source.

☐ Source aggregated with another source. List Company/Facility Name:

RECOMMENDATION TO DIRECTOR

The information provided in the permit application, including all supplemental information received, indicates the applicant meets all the requirements of applicable regulations and the applicant has shown they meet the eligibility requirements of General Permit G70-D. Therefore, impact on the surrounding area should be minimized and it is recommended that the facility should be granted registration under General Permit G70-D.

Permit Engineer Signature: _____

Name and Title: Roy F. Kees, P.E. - Engineer, NSR Permitting

Date: February 1, 2017